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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/785,046	02/25/2004	Wilhelmus Josephus Box	081468-0308294	8581
909	7590	02/10/2005	EXAMINER	
PILLSBURY WINTHROP, LLP			KIM, PETER B	
P.O. BOX 10500			ART UNIT	
MCLEAN, VA 22102			PAPER NUMBER	
			2851	

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

Office Action Summary

Application No.

10/785,046

Applicant(s)

BOX, WILHELMUS JOSEPHUS

Examiner

Peter B. Kim

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 10/307,485.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>22004</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Holzer et al. (Holzer) (6,132,676).

Holzer discloses a method of manufacturing a component that will experience a thermal load and will be operated at a mean operating temperature (col. 5, lines 38-49) comprising selecting a material having a coefficient of thermal expansion having a zero-crossing at a first temperature; manufacturing the component using the selected material at a second temperature, wherein the first temperature is between the second temperature and the mean operating temperature, so as to minimizing deformation of the component at the mean operating temperature (Fig. 5) (col. 9, lines 18-59). Holzer discloses the material having a low coefficient of thermal expansion having a substantially zero coefficient of thermal expansion (abstract).

Holzer discloses the material having ceramic (col. 3, lines 4-41).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis, Jr. et al. (Davis) (6,465,272) in view of Holzer et al. (Holzer).

Davis discloses a method of manufacturing an optical element, a device manufacturing method and a lithographic projection apparatus, comprising: a radiation system constructed and arranged to provide a projection beam of radiation (40); a support structure (24) constructed and arranged to support a patterning device, the patterning device constructed and arranged to pattern the projection beam according to a desired pattern; a substrate table to hold a substrate (56); a projection system (54) constructed and arranged to project the patterned beam onto a target portion of the substrate, wherein at least one component (26) in the apparatus that in use experiences a heat load is made of a low coefficient of expansion material having a coefficient of thermal expansion having a zero-crossing at a temperature between a manufacturing temperature and an operating temperature of that component (col. 5, lines 8-49). However Davis does not disclose the zero-crossing occurring between the manufacturing temperature and the mean operating temperature. Holzer discloses a method of manufacturing a component and a component that will experience a thermal load and will be operated at a mean operating temperature (col. 5, lines 38-49) comprising selecting a material having a coefficient of thermal expansion having a zero-crossing at a first temperature; manufacturing the component using the selected material at a second temperature, wherein the first temperature is between the second temperature and the mean operating temperature, so as to minimizing deformation of the component at the mean operating temperature (Fig. 5) (col. 9, lines 18-59). Holzer discloses the material having a low coefficient of thermal expansion having a substantially zero coefficient of thermal expansion (abstract). Holzer discloses the material having ceramic (col. 3, lines 4-41).

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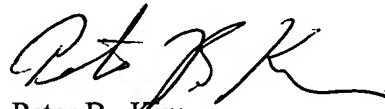
Therefore, it would have been obvious to one of ordinary skill in the art to provide the component with the coefficient of thermal expansion so that the zero-crossing occurs before reaching the mean operating temperature to the invention of Davis in order to obtain material that is low or zero coefficient of thermal expansion and high thermal conductivity as taught by Holzer in col. 4, lines 13-27.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter B. Kim whose telephone number is (571) 272-2120. The examiner can normally be reached on 8:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Peter B. Kim
Primary Examiner
Art Unit 2851

February 5, 2005